

WHAT IS CLAIMED IS:

1. A device for mounting on a support surface and for holding for a pole to which can be attached a web of material, such as a flag, banner or the like, said device comprising:

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(A) a plate for being mounted to said support surface;

(B) a shaft that

(1) defines a longitudinal axis of rotation;

(2) has a first end and an opposite second end;

(3) has a cam follower surface defined at said first end;

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and

(4) has a radially projecting rib at said second end;

(C) a first end cap that

(1) is attached to said plate at a first location; and

(2) rotatably retains said shaft first end;

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(D) a second end cap that

(1) is attached to said plate at a second location spaced from said first location;

(2) rotatably retains said shaft second end; and

(3) defines two spaced-apart abutment surfaces for being

20 engaged by said rib to limit the rotation of said shaft on said axis;

E) a cam surface that is at said first end cap in a fixed orientation for mating with said shaft first end cam follower surface when said shaft is in a predetermined home position defined by a predetermined rotational orientation;

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(F) a holder that extends from said shaft and that defines a receiving hole for holding an end of said pole at an angle to said axis; and

(G) a helical spring that is

(1) received in said second end cap;

(2) has one end restrained by said second end cap against axial movement away from said shaft second end; and

(3) has another end for exerting an axial biasing force on said shaft second end for continuously biasing said shaft first end cam follower surface against said cam surface at said first end cap to urge said shaft toward said predetermined home position whereby said shaft can be rotated away from said home position if a sufficient torque is applied to said shaft and whereby said shaft returns to said home position when said sufficient torque is removed from shaft.

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2. The device in accordance with claim 1 in which said second end cap includes a peripheral wall defining a cavity for receiving said shaft second end;

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said shaft second end defines a plurality of circumferentially spaced channels which each is generally parallel to said axis;

said second end cap peripheral wall defines at least one threaded aperture extending through said peripheral wall; and

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said device further includes a set screw threadingly engaged in said aperture for being selectively adjusted between (1) a locking position in which the distal end of said set screw projects from said aperture beyond the interior of said peripheral wall into one of said shaft channels to prevent rotation of said shaft, and (2) an unlocked position in which the distal end of said set screw is retracted outwardly of said channel and inside said aperture in said peripheral wall to permit rotation of said shaft.

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3. The device in accordance with claim 1 in which said cam surface has a circular plan configuration in a plane perpendicular to said axis and has a concave profile in a plane parallel to said axis; and

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said cam follower surface has a generally circular plan configuration in a plane perpendicular to said axis and has a convex profile in a plane parallel to said axis.

5 4. The device in accordance with claim 3 in which said convex surface is defined by a partially cylindrical surface and said concave surface is defined by a partially cylindrical surface having a radius that is substantially the same as the radius of said convex surface.

10 5. A device for mounting on a support surface and for holding at least a first member, said device comprising:

(A) first and second end caps for each being fixed relative to said support surface and for together defining a longitudinal axis of rotation;

(B) a shaft that

15 (1) has first and second opposite ends;

(2) is supported between said first and second end caps along said axis with said first end at said first end cap and with said second end at said second end cap;

(3) is at least partly rotatable on said axis; and

20 (4) has a cam follower surface defined at said first end;

(C) a cam surface in a fixed orientation at said first end cap for engaging said shaft first end cam follower surface;

(D) a biasing mechanism at said second end cap for continuously exerting a biasing force against said shaft second end to continuously

25 force said shaft first end cam follower surface against said cam surface at said first end cap to urge said shaft toward a predetermined home position defined by a predetermined rotational orientation whereby said shaft can be rotated away from said home position if a sufficient torque is applied to said shaft and whereby said shaft returns to said home position when said sufficient torque is removed from said shaft; and

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(E) a holder on said shaft for holding said first member.

6. The device in accordance with claim 5 in which
said device further includes a plate for being mounted to said
5 support surface; and
said first and second end caps are separate pieces that are each
attached to said plate.

10 7. The device in accordance with claim 5 in which said cam
surface is defined on a disc which is disposed in said first end cap.

8. The device in accordance with claim 5 in which said holder is
an arm projecting at an angle from said shaft, said arm defining a hole
for receiving an end of said first member.

15 9. The device in accordance with claim 8 in which said device
includes a screw for releasably engaging an end of said first member in
said hole.

20 10. The device in accordance with claim 8 in which said device
further includes a bracket mounted to said arm, said bracket defining a
receiving region for receiving a second member.

25 11. The device in accordance with claim 10 in which said bracket
is releasably retained on said arm with a snap-fit engagement defined by
an annular bead on said arm and an annular channel in said bracket collar
for matingly receiving said bead.

12. The device in accordance with claim 10 in which

1 said bracket has a collar for fitting on the distal end of said arm around said hole; and

5 said bracket receiving region is a bore for receiving an end of said second member.

13. The device in accordance with claim 12 in which said device further includes a screw for being mounted in said bracket for releasably engaging an end of said second member in said bore.

10 14. The device in accordance with claim 5 in which said second end cap defines a generally cylindrical recess; said biasing mechanism includes

(1) a bearing cap that is (a) disposed in said recess, and
(b) has a boss projecting toward said shaft second end; and

15 (2) a generally helical spring having one end disposed around said boss and having another end bearing against said shaft second end.

16. The device in accordance with claim 14 in which said shaft second end defines a generally cylindrical cavity for receiving said another end of said spring.

20 25 16. The device in accordance with claim 5 in which said second end cap defines a cavity for receiving said shaft second end; and

said cavity is defined in part by a peripheral wall around said cavity.

17. The device in accordance with claim 16 in which

said peripheral wall defines a lateral recess along a portion of said cavity, said recess extending partially circumferentially around said axis between two spaced-apart abutment surfaces; and

5 said shaft has a rib that is at said second end and that projects into said recess for engaging either of said two spaced-apart abutment surfaces to limit the rotation of said shaft on said axis.

10 18. The device in accordance with claim 16 in which
 said shaft second end defines a plurality of circumferentially
 spaced channels which each is generally parallel to said axis;
 said second end cap peripheral wall defines at least one threaded
 aperture extending through said peripheral wall; and
 said device further includes a set screw threadingly engaged in said
 aperture for being selectively adjusted between (1) a locking position in
15 which the distal end of said set screw projects from said aperture beyond
 the interior of said peripheral wall into one of said shaft channels to
 prevent rotation of said shaft, and (2) an unlocked position in which the
 distal end of said set screw is retracted outwardly of said one shaft
 channel and inside said aperture in said peripheral wall to permit rotation
20 of said shaft.

25 19. The device in accordance with claim 5 in which
 said cam surface has a circular plan configuration in a plane
 perpendicular to said axis and has a concave profile in a plane parallel to
 said axis; and
 said cam follower surface has a generally circular plan
 configuration in a plane perpendicular to said axis and has a convex
 profile in a plane parallel to said axis.

20. The device in accordance with claim 19 in which said convex surface is defined by a partially cylindrical surface and said concave surface is defined by a partially cylindrical surface having a radius that is substantially the same as the radius of said convex surface.